US 20110129841A1

(19) United States

(12) Patent Application Publication

(10) Pub. No.: US 2011/0129841 A1

(43) Pub. Date: Jun. 2, 2011

Heid et al.

(54) **ANALYSIS USING MICROFLUIDIC PARTITIONING DEVICES**

(75) Inventors: **Christian A. Heid**, Redwood City, CA (US); **Antoine Daridon**, Mont-Sur-Rolle (CH)

(73) Assignee: **Fluidigm Corporation**, South San Francisco, CA (US)

(21) Appl. No.: **12/945,483**

(22) Filed: **Nov. 12, 2010**

Related U.S. Application Data

(63) Continuation of application No. 11/916,025, filed on Dec. 10, 2008, filed as application No. PCT/US06/21416 on Jun. 2, 2006.

(60) Provisional application No. 60/687,010, filed on Jun. 2, 2005.

Publication Classification

(51) **Int. Cl.**

C12Q 1/68	(2006.01)
C12Q 1/02	(2006.01)
B01L 3/00	(2006.01)

(52) **U.S. Cl.** **435/6.12**; 435/6.1; 435/29; 422/502

(57) **ABSTRACT**

The invention relates to methods, reagents and devices for detection and characterization of nucleic acids, cells, and other biological samples. Assay method are provided in which a sample is partitioned into sub-samples, and analysis of the contents of the sub-samples carried out. The invention also provides microfluidic devices for conducting the assay. The invention also provides an analysis method using a universal primers and probes for amplification and detection.